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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,224	06/25/2003	Thomas S. Murphy	3317.126 US1	4383

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EXAMINER	
DESAI, ANISH P	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/603,224	MURPHY ET AL.	
	Examiner	Art Unit	
	Anish Desai	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) *18-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The applicant's arguments in response to the Office action dated 07/28/05 have been fully considered.

1. The objection to the specification is withdrawn in view of the present amendment and response (see page 6 of 02/02/06 amendment).

2. The 35 USC Section 112 claim rejections are maintained.

3. The 35 USC Section 102 art rejections over Schneler et al. (US 2,740,403) are withdrawn in view of the present amendment and response (see pages 2 and 6 of 02/02/06 amendment).

4. The 35 USC Section 103 art rejections over Schneler et al. (US Patent 2,740,403) in view of Murphy et al. (US Patent 5,762,623) are maintained.

Election/Restrictions

5. Applicant's affirmation of election of with traverse of Group I, Claims 1-17 in the reply filed on 02/02/06 is acknowledged. Claims 18-27 are withdrawn from consideration.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention substantially as set forth in 07/28/05 Office action. Claim 3

recites "...wherein said adhesive-carrying porous fabric covers no more than 50% of the article surface area.". It is unclear as to what the applicant means by "said adhesive-carrying porous fabric covers no more than 50% of the **article surface area**". The examiner is having difficulty in understanding what does applicant mean by adhesive carrying fabric covering no more than 50% of the **article surface area**. Does the applicant want to convey that the adhesive covers no more than 50% of the surface area of the **fabric surface** on which the adhesive is applied?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1 and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneler et al. (US Patent 2,740,403) in view of Murphy et al. (US Patent 5,762,623) substantially as set forth in 07/28/05 Office action.

Schneler et al. teach adhesive bandages for medical and surgical purpose (Column 1, line15-16). The adhesive bandage of Schneler et al. is a two-ply bandage containing a backing, which is made from a porous fabric and another thickness (known as carrier) made of an open mesh fabric that is impregnated or coated with an adhesive in such manner that the fabric remains substantially porous (Column 1, lines 22-33). The carrier is adhered to one surface of the backing to form two-ply bandage (Column

1, line 33-34). The examiner is equating the carrier of Schneler et al. as claimed adhesive-carrying fabric.

Schneler et al. do not explicitly teach that the fabric having porosity greater than that of the backing as claimed and the adhesive or the adhesive-carrying fabric located on the fabric in such a manner that the fabric remains more porous than the backing substrate. However, Figure 2 of Schneler et al. shows the upper ply or backing 6 which is a closely woven fabric with openings 7 with the size of each opening being 0.005 in and as shown in the Figure 3, the lower ply or the carrier 8 with the size of each opening being 0.01 in. Thus, this teaching of Schneler et al. reads on the fabric having porosity greater than that of the backing substrate. Further Schneler et al. teach that the lower ply or the carrier 8 with the size of each opening being 0.01 is impregnated or coated with the rubber or other adhesive and treated as above set forth so that it has the necessary porosity (Column 2, lines 42-53). Thus, the adhesive impregnated lower ply or the carrier 8 of Schneler et al. seems to retain its porosity even after the adhesive impregnation and reads on the adhesive of the adhesive carrying fabric located on the fabric in such a manner that the fabric remains more porous than the backing substrate as presently claimed.

Schneler et al. are silent as to teaching of the claimed property of the tensile strength as claimed in the claim 1. However, Murphy et al. teach a laminated tape/bandage comprising a layer of transversely-spaced, longitudinally-extending elastic strands between a pair of outer layers, at least one of which is a warp-knitted (weft insertion) fabric oriented with knit yarns extending longitudinally and generally parallel to

the orientation of the elastic strands (see Abstract). The warp-knitted (weft insertion) fabric layer of Murphy et al. is shown in Figure 3 of Murphy et al., wherein the fabric is oriented so that knitted warp yarns 50extend generally from the left to right and the loose of non-twisted weft yarns 60 extend vertically (Column3, lines 41-44). The knitted warp yarns are 45 denier and weft yarns are 150 denier (Column 2, lines 47-49). The examiner is equating the direction of warp yarns to be in the machine direction and the direction of fill or weft yarns to be in the cross direction. Although, Murphy et al. do not explicitly teach that the warp yarns of 45 denier have lower tensile strength than the weft yarns of 150 denier, it is obvious that the warp yarns have lower tensile strength because of the warp yarns of 45 denier are thinner than the weft yarns of 150 denier. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the warp-knitted (weft insertion) fabric layer of Murphy et al. and used it in the invention of Schneler et al. as a carrier, motivated by the desire to provide an adhesive bandage that is relatively easy to tear by hand.

Regarding claims 4 and 5, the backing can be a woven material (Column 1, line 26) and carrier can be formed from woven and knitted materials (Column 1, lines 57-58). Although, Schneler et al. do not explicitly teach non-woven and knitted as a backing as claimed in the claim 4 and non-woven as an adhesive carrying fabric as claimed in the claim 5, it is well known in the art that the porous sheet materials are used in tapes in medical field and are generally porous sheets selected from non-woven, woven, or knitted materials as evidenced by the US Patent 5,914,282 (see (Column 1, lines 18-20).

Regarding claims 6 and 7, Schneler et al. are silent with respect to teaching warp knit fabric as claimed in the claim 6 and weft insert yarn as claimed in the claim 7. However, Murphy et al. disclose a laminated tap/bandage where one of the layers is made from warp-knitted (weft insertion) fabric (see Abstract). The objective of the invention of Murphy et al. is to provide a tape that can tear easily by hand, inexpensive, and is soft and comfortable to wear (Column 1, lines 57-60). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the warp-knitted (weft insertion) fabric of Murphy et al. as a carrier layer in the invention of Schneler et al., motivated by the desire to provide an adhesive bandage that is easy to tear by hand, inexpensive, soft, and comfortable to wear.

Regarding claim 8, the backing and carrier of the two-ply bandage of Schneler are elastic and extensible in one or both directions (Column 1, lines 40-42, Column 3, lines 3-6).

Regarding claims 9-12, Schneler et al. as modified by Murphy et al. discloses the claimed invention except for that the adhesive carrying fabric comprises more than 80% open area prior to application of the adhesive as claimed in claim 9, % open area of the adhesive carrying fabric is reduced by no more than 10% upon the application of the adhesive as claimed in the claim 10, backing substrate comprising greater than about 25% open area as claimed in the claim 11, and backing substrate comprising greater than about 50% open area a claimed in the claim 12. It should be noted that the openness of a fabric or % open area is considered as a result effective variable. For example, by having higher percent of open area in the fabric causes the fabric to breath

easily, which allows fabric to be more permeable to air. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the adhesive carrying fabric comprising more than 80% open area prior to application of the adhesive as claimed in claim 9, % open area of the adhesive carrying fabric is reduced by no more than 10% upon the application of the adhesive as claimed in the claim 10, backing substrate comprising greater than about 25% open area as claimed in the claim 11, and backing substrate comprising greater than about 50% open area claimed in the claim 12, since it has been held that the discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Regarding claim 13, the inventions of Schneler et al. and Murphy et al. are previously disclosed. Although, Schneler et al. as modified by Murphy et al. does not explicitly teach that the adhesive penetrates into the one surface of the backing substrate, note that the backing of Schneler et al. is porous, therefore the adhesive of Schneler et al. will obviously penetrate into the backing.

Regarding, claim 14, Schneler et al. as modified by Murphy et al. discloses the claimed invention except for that adhesive penetrates into about 25% to 75% of the thickness of the backing substrate. Note that the level of penetration of adhesive into the backing is considered as a result effective variable. For example, higher the amount of adhesive penetration in the backing, stronger the strength of the bond between the fabric and the backing. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to allow the adhesive to penetrate into about

25% to 75% of the thickness of the backing substrate, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Regarding claim 15, Schneler et al. are silent with respect to teaching adhesive with sufficient cohesive strength as claimed. However, the binder of Murphy et al. that is used in laminating the three layers together to form the finished products can be made cohesive (i.e. will stick only to itself) or adhesive (Column 3, lines 6-10). Note that the examiner is equating the binder of Murphy et al. as an adhesive. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the binder of Murphy et al. with the cohesive property in the invention of Schneler et al., motivated by the desire to effectively bond the carrier and backing layers of Schneler et al.

Regarding claim 16, the inventions of Schneler et al. and Murphy et al. are previously disclosed. Although, Schneler et al. as modified by Murphy et al. does not explicitly teach the claimed property (i.e. an article that tears uniformly), it is reasonable to presume that that said property is present in the product of Schneler et al. as modified by Murphy et al. Support for said presumption is found in the use of the like materials. For example, Schneler et al. disclose a porous backing and adhesive impregnated or coated carrier that is made of a fabric. Murphy et al. disclose laminated tape/bandage that is easy to tear by hand. Thus, the presently claimed property is necessarily present in the product of Schneler et al. as modified by Murphy et al.

Regarding claim 17, Schneler et al. are silent as to teaching of elastic yarns. However, Murphy et al. teach an inexpensive, elastic tape or bandage that can be tear easily by hand. The tape/bandage of Murphy et al. contains a middle layer of longitudinally extending elastic strands (Column 2, lines 33-38). Murphy et al. teach that the compared to prior art laminated products, the appearance, tear characteristics, and longitudinal strength of the tape/bandage of their invention are superior. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the elastic strands of Murphy et al. in the adhesive bandage of Schneler et al., motivated by the desire to provide an inexpensive elastic bandage that is easy to stretch.

8. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneler et al. (US Patent 2,740,403).

Schneler et al. teach adhesive bandages for medical and surgical purpose (Column 1, line15-16). The adhesive bandage of Schneler et al. is a two-ply bandage containing a backing, which is made from a porous fabric and another thickness (known as carrier) made of an open mesh fabric that is impregnated or coated with an adhesive in such manner that the fabric remains substantially porous (Column 1, lines 22-33). The carrier is adhered to one surface of the backing to form a two-ply bandage (Column 1, line 33-34). The examiner is equating the carrier of Schneler et al. as claimed adhesive-carrying fabric.

Although, Schneler et al. do not explicitly teach that the fabric having porosity greater than that of the backing as claimed, Figure 2 of Schneler et al. shows the upper ply or backing 6 which is a closely woven fabric with openings 7 with the size of each opening being 0.005 in and as shown in the Figure 3, the lower ply or the carrier 8 with the size of each opening being 0.01 in. The lower ply is impregnated or coated with an adhesive (Column 2, lines 42-51). Thus, the backing of Schneler et al. has a lower porosity than the carrier because the openings of the backing are smaller in size than the openings of the carrier (i.e. lower ply). With respect to the claim limitation of the adhesive of the adhesive carrying fabric located on the fabric in such a manner that the adhesive carrying fabric remains porous, Schneler et al. teach that the carrier can also be formed in a great variety of manners. Further according to Schneler et al., the carrier may be woven, knitted or otherwise formed to give an open-mesh fabric which is subjected to an impregnation treatment with the adhesive and then after impregnation can also be given additional coating on its outer surface and in any case in the result, so that by differential pressure treatment, striking off, doctoring, or otherwise, it still presents, although impregnated, a substantially porous structure (Column 1, lines 57-65). Schneler et al. teach claimed invention except the penetration of adhesive into about 25% to 75% of the thickness of the porous substrate, however since the invention of Schneler et al. has the same utility (i.e. medical and surgical bandages), the adhesive of the Schneler et al. would necessarily have to penetrate about 25% to 75% of the thickness of the porous backing of Schneler et al. in order to successfully practice the instantly claimed invention. Although Schneler et al. does not explicitly teach that

adhesive-carrying porous fabric covers no more than 50% of the article surface area, according to Schneler et al., in most case the carrier is formed from ordinary cotton open mesh fabric which normally is used for non-adhesive bandages. By impregnating this fabric with the adhesive there is obtained an adhesive ply or layer which is substantially porous or can be so rendered and if necessary by repeating such operations with a suitable diluted adhesive and adequate amount should adhered to said fabric on its outer surface to give sufficient potential adhesion to the skin of the patient. In any case, steps may be taken by air pressure, stripping, or doctoring so that such cotton open-mesh fabric has the requisite porosity fully defined (Column 2, lines 3-14). Thus, it is the examiner's position that since Schneler requires the open-mesh fabric to maintained its requisite porosity, the adhesive on the outer surface of the open mesh fabric of Schneler et al. would necessarily have to cover no more than 50% of the surface area of the open-mesh fabric in order for the fabric to maintained its porosity.

Response to Arguments

9. Applicant's arguments filed 02/02/06 have been fully considered but they are not persuasive.

10. The obviousness type rejections taken alone in view of Schneler et al (US Patent 2,740,403) and in combination with Murphy et al. (US Patent 5,762,623) are maintained for the following reasons.

The applicant argues there would be no motivation to combine the teachings of Murphy et al. relating to the use of a wrap-knitted (weft insertion) fabric layer, which

would impart hand tear properties on a laminated article into which it is incorporated with the teachings of Schneler et al., which purports to teach an adhesive bandage with "breathing pores". The examiner respectfully disagrees. The examiner respectfully points out that the motivation to combine the teachings of Murphy et al. relating wrap-knitted (weft insertion) fabric layer with the carrier of Schneler et al. is clearly set forth in the 07/28/05 Office action. Further note that Murphy et al. clearly teach an adhesive tape/bandage which can easily torn by hand (Column 3, lines 19-24 and lines 32-33). The invention of Schneler is also directed to adhesive bandages (Column 1, lines 15-16). Thus, a skilled artisan would have been obviously motivated to provide the hand tear property to the adhesive bandage of Schneler as taught by Murphy et al. Moreover, note that Under Section 103, the obviousness of an invention cannot be established by combining the teachings of the prior art references absent some teaching, suggestion or incentive supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). **This does not mean that the cited prior art references must specifically suggest making the combination.** *B.F. Goodrich Co. M Aircraft Braking Systems Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996); *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988)). Rather, the test for obviousness is what the combined teachings of the prior ad references would have suggested to those of ordinary skill in the art. *In re Young*, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). **This test requires us to take into account not only the specific teachings of the**

prior art references, but also any inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

The applicant argues that even if the motivation to combine the teachings of Murphy et al. relating to the use of a wrap-knitted (weft insertion) fabric layer with the teachings of Schneler et al. was present, such combination would not provide reasonable expectation of success in making such a combination. In support applicant argues that first Murphy et al. does not teach a porous article and further the applicant argues that Murphy et al. teach a laminated tape in which a wrap-knitted (weft insertion) fabric is bonded together to a second layer, which is elastic. An important aspect of achieving hand tear in a tape is to ensure that the individual fibers or yarns of the warp-knitted (weft insertion) fabric are held in place and prevented form sliding/and or "bunching up", when a transverse tearing force is applied to the tape. If the individual fibers are allowed to "bunch up" in such a manner, the force required to break through their collective strength is greater than which can be readily generated by an average human hand. Accordingly, the proper bonding of these individual fibers or yarns to an anchoring second layer is important to achieve hand-tear. Thus, the applicant asserts that the porous backing layer of Schneler et al. would not be expected to provide continuous contact (enough anchoring) with a wrap-knit (weft insertion) fabric layer of Murphy et al. to prevent "bunching up" of the fibers or yarns. The examiner respectfully disagrees. The examiner recognizes that Murphy et al. does not explicitly teach "porous" fabric. However, note that the fabric layer of Murphy et al. as shown in Figure

3 and Figure 4 is porous due to the open spaces between the warp and weft yarns. With respect to applicant's argument that the porous backing of Schneler would not be expected to provide continuous contact (anchoring) with a warp-knit (weft insertion) fabric layer of Murphy et al. This argument is found not persuasive because the applicant has not provided any factual evidence or declaration showing that the warp-knit (weft insertion) fabric layer of Murphy et al. when combined with the porous backing of Schneler et al. would not provide continuous contact (anchoring) and thus there would be no reasonable expectation of success in making such combination. Therefore the applicant's argument is based on applicant's personal opinion and not based on any factual evidence.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anish Desai whose telephone number is 571-272-6467. The examiner can normally be reached on Monday-Friday, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

APD

Hai Vo

HAI VO
PRIMARY EXAMINER